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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/776,664	02/10/2004	Shrinivas Ashwin	MSI-3545US	3391
22801	7590	09/26/2007		
LEE & HAYES PLLC 421 W RIVERSIDE AVENUE SUITE 500 SPOKANE, WA 99201			EXAMINER HO, BINH VAN	
			ART UNIT 2163	PAPER NUMBER
			MAIL DATE 09/26/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 16 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-8,10-18,20-28 and 30 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8,10-18,20-28 and 30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02/10/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4, 7-8, 10-14, 17-18, 20-24, 227-28, and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Bruso (U.S. 6,615,219).

(Claims 1, 11, and 21)

Bruso discloses in figure 6, a method, computer-readable medium, and a system utilizing the same functionality for handling a large data object in a computer system (col. 1, lines 56-67), said method comprising creating a handling structure comprising a reference to locate the large data object and information to return an interface to provide access to the large data object (col. 1, lines 59-67; col. 7, lines 42-49); wherein said handling structure has a lifetime, and said handling structure comprising a field having a value corresponding to said lifetime; (col.4, lines 29-35; col.4, lines 38-40) wherein said handling structure can be processed by said computer system, via functions (col. 6, lines 22-39), operations (col.6, lines 50-59), and so forth available for a small data object (col. 3, lines 12-19), with which said large data object could not be so processed (col. 6, lines 19-22).

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(Claims 2, 12, and 22)

Bruso discloses in figures 2-3, 7, wherein a first handling structure pointing to a first large data object is virtually copied by the creation of a second handling structure (Figures 2-3, all features further defined in column 3, lines 5-45) that points to the same first large data object provided that the first handling structure and the second handling structure do not write a change to said first large data object (Figure 7, diagram 414)).

(Claims 3, 13, and 23)

Bruso discloses wherein, if said first handling structure must write a change to said first large data object, said first large data object is copied to a second large data object (col. 6, lines 15-19) and said second handling structure is pointed to said second large data object prior to the first handling structure writing the change to the first large data object (col. 6, lines 24-39).

(Claims 4, 14, and 24)

Bruso discloses in figures 3, 7-8, wherein, if said second handling structure must write a change to said first large data object (Figure 7, diagram 416, and 418), said first large data object is copied to a second large data object (Figure 8, diagram 458) and said second handling structure is pointed to said second large data object (Figure 3, all features), and then said second handling structure will write the change to the second large data object (Figure 8, diagram 462).

(Claims 7, 17, and 27)

Bruso discloses wherein said handling structure corresponds to a small value data object (Refer to claim 1), and said small value data object is stored entirely within the said handling structure (col. 1, lines 32-35; col. 3, lines 10-12).

(Claims 8, 18, and 28)

Bruso discloses further comprising a delete operation for said handling structure (col. 4, lines 41-48), wherein if said handling structure is of a first type, said handling structure and a corresponding large data object are both deleted (col. 5, lines 43-49), and wherein if said handling structure is of a second type, only said handling structure, and not said corresponding large data object, is deleted col. 4, lines 41-48).

(Claims 10, 20, and 30)

Bruso discloses wherein said handling structure is created (col. 4, lines 29-35) by a handling structure factory in response to a need for a handling structure (col. 1, lines 46-50).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5-6, 15-16, and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bruso (U.S. 6,615,219) in view of Becker (U.S. 6,301,579).

(Claims 5, 15, and 25)

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Bruso discloses substantially all of the elements, except wherein a data object having a type from among the group of types comprising text, ntext, and image data types is converted into a large data object with a corresponding handling structure. Becker teaches wherein a data object having a type from among the group of types comprising text, ntxt, and image data types is converted into a large data object with a corresponding handling structure (column 7, line 44-45, wherein categorical attributes have nominal values like text strings, column 7, lines 13-17, wherein using on-line analytical processing, OLAP, a relational data set can be converted into a summarized hypercube data structure in order to perform fast queries, column 19, line 63-64, wherein print an image of the current display). It would have been obvious at the time the invention was made for one person of the ordinary skill in the art to modify the disclosure of Becker to provide faster processors, additional bandwidth, and more storage for applications.

(Claims 6, 16, and 26)

The combination of Bruso in view of Becker teaches wherein a data object having a type from among the group of types comprising\_text, ntext, and image data type is converted into a data object (Refer to claim 5, wherein this limitation is substantially the same/or similar) having a type from among the group of types comprising varchar(MAX), nvarchar(MAX), or varbinary(MAX) respectively wherein varchar(MAX), nvarchar(MAX), and varbinary(MAX) (Figure 19, all features) comprise a handling structure )see Abstract) and the MAX corresponds to a predetermined maximum size value (col. 30, lines 7-10).

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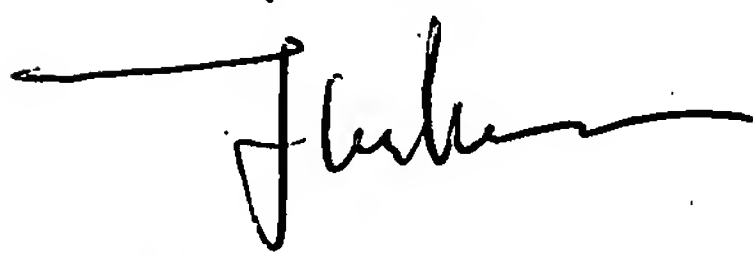
### Inquiry

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Binh V. Ho whose telephone number is 571 272 8583. The examiner can normally be reached on M-F from 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don K. Wong can be reached on 571 272 1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

9/21/07



Hung vy  
For SPE DON WONG

Binh V Ho  
Examiner  
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